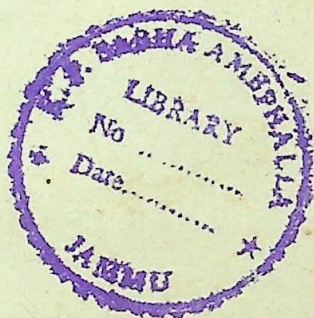


PRESERVATION OF THE SCENE OF CRIME AND EVIDENCE COLLECTION



T.G.L. IYER
Deputy Director

Bureau of Police Research and Development

Ministry of Home Affairs

Government of India

New Delhi

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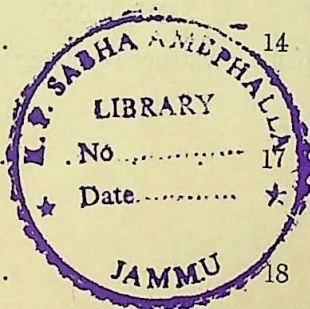


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CHAPTER I

IMPORTANCE OF SCENE OF CRIME AND ITS PRESERVATION

I IMPORTANCE OF SCENE OF CRIME

Importance of scene of crime makes its inspection necessary. Inspection is a part of investigation. The term investigation is defined in section 2(h) Cr.P.C. It means **collection of evidence** for placing them before the court of law and under section 157 Cr.P.C. police can proceed to the spot to ascertain facts and circumstances of the case, and if necessary, to take measures for discovery and arrest of the offender. So an inspection of scene of crime may help to prove or disprove an allegation or to influence belief or disbelief of persons making investigation or trying the case at a later stage. It becomes the foundation of investigation into a crime. But all its importance will wear off if the evidence is not properly taken care of. For this purpose evidence must be—

- (a) legally obtained;
- (b) fully explored;
- (c) completely protected;
- (d) properly identified;
- (e) legally handled;
- (f) adequately described;
- (g) immediately recognised of its value and its potential use in the case; and
- (h) properly presented before the court.

II PRESERVING THE CRIME SCENE

Preserving, in this context, means freezing the scene of crime, i.e. to see that the scene remains in exactly the same manner as it was at the time of the occurrence of crime and immediately after it, with the sole object of preventing the disturbance/disappearance of physical evidence available at the scene till the investigator arrives and completes his work. Physical evidence consists of the various objects present at the scene—some large and others microscopically small. To the trained investigator as well as to the scientist in the forensic science laboratory, each such object would reveal some specific information having a direct bearing

on the crime. In securing the scene one secures the evidence. What actually constitutes such evidence, its importance, etc. are briefly detailed in the third chapter of this booklet under the heading Evidence Collection Mission. The officer engaged in the task of securing the scene should be aware of the irrefutable certainties:

- (1) that somewhere and somehow silently imprinted upon the scene before him are evidentiary statements about the criminal's motives, actions, physical force, struggle of the victim etc. and
- (2) that the criminal has carried away some part of the scene with him—on his body clothing, vehicle etc. in one manner or another—as can be verified sooner or later through a thorough examination of the scene and the perpetrator and his environments.

Once the officer is aware of the importance of silent clues he would be able to appreciate the value of the physical evidence and thus the need to meticulously secure such evidence. The scene of crime may be either indoors or outdoors. Wherever it is, securing should begin as promptly as possible after other priorities have been attended to. For normal securing of outdoor scenes, about 200 feet of light tough rope and an ample supply of DO NOT ENTER cardboard signs should suffice. The scene can be enclosed by loosely tying the rope around available objects like trees, posts, vehicles etc. The no entry signs can be suspended from the rope on all sides. It should be remembered that physical evidence may be lying scattered at some distance away from the main scene of the crime. Hence it would be judicious to secure not only the scene of the actual crime but also the secondary scene as well. The rope may occasionally prove useful indoors also. The no entry signs can be attached around chairs, doors and other objects, placed outside the room or area barring entrance. All such instructions should be in a language understood by the people. Every effort should be made to prevent all unauthorised persons from entering upon or disturbing the scene in any manner or for any reason whatsoever.

Thus secured and the evidence preserved, it will go a long way in assembling bit by bit objects of evidentiary value useful to the police or the scientific investigators, whose duty it is to look for them, and recover them. As

such, any unauthorised interference with the physical evidence could considerably hamper the experts in their investigation and may result in their failing to recover objects of very vital evidentiary value which could help them to prove that a crime was committed, to demonstrate the criminal's mode of operation, and to identify the perpetrator and clear the innocent.

In protecting the scene of crime, the following principles are to be followed:

- (a) If the victim is unconscious, every effort should be made to save the life. A few words from this important witness will be of great value in solving the crime and arresting the culprit.
- (b) The scene of crime should be maintained as it was originally found. There should be no addition or alteration.
- (c) The entire area from the point of assembly to the point of dispersal should be isolated and protected.
- (d) No body will be allowed to enter or alter the scene.
- (e) The curiosity seekers should be excluded.
- (f) Under no condition any body should be permitted to leave the scene until the officer has interrogated him and taken down his name, address and other pieces of information.

The entire principle behind preservation of scene of crime can be summed up in the following maxims:

Do's

Don'ts

- | | |
|--|---|
| 1. Guard everything. | 1. Touch nothing. |
| 2. Cover area wider not less than what is necessary. | 2. Never touch, change or alter anything until identified, measured and photographed. |
| 3. Observe everything. | 3. Don't try to set right anything. |
| 4. Take note of every peculiarity. | |

N.B.—Remember that when a body or an article has been moved, it can never be restored to its original position.

CHAPTER II

EVIDENCE COLLECTION MISSION

"The most important function of a scientific evidence is to convert suspicion into a reasonable certainty of either guilt or innocence". The above is a quotation from the book on Forensic Science by H.J. WALLS. This sums up neatly the object and purpose of evidence collection.

2. Scientific examination of the evidence should be aimed at to answer the following questions:

- (i) Has a crime or tort been committed?
- (ii) How and when was the crime committed?
- (iii) What information in a general way be obtained to identify the perpetrator?
- (iv) Are the accused and the person characterised as having committed the crime in fact one and the same person?
 - (a) by establishing a connection between some physical evidence associated with the crime and some personnel characteristic of the accused, blood group, finger print, etc;
 - (b) by showing a connection between the scene of crime and something which is definitely linked with the accused like scratch marks by his tools, fibres from his clothing, etc.

3. While committing crime the criminal's contact with objects he carries, handles, touches etc. bears mute evidence against him. His fingerprints, footprints, his hair, fibres from his clothes, the glass he breaks, the tool mark he leaves, the paint he scratches, blood or semen, even the aroma of his perfume, cigars and cigarettes etc. all these play a vital role in connecting him to the crime. It is these things that together constitute the broad field of physical evidence. An investigator must concern himself both with people as well as with the things involved in any crime. The enormous potentialities of physical evidence must be completely assessed and appreciated. It has no motive or bias. It can, however, be misinterpreted and when this results in the failure of such evidence, the draw back is not in the evidence but in the person whose job it is to interpret the evidence, correctly. Large numbers of criminals still escape

daily because the physical evidence is not properly interpreted and utilised. Law enforcement officers probably make more errors in the collection and subsequent handling of physical evidence than in any other of their duties. It is the purpose of this booklet to aid the conscientious investigator both in the field as well as in the laboratory to realise all the advantages that can accrue from a careful collection and intelligent examination of all types of physical evidence so that vital facts in an investigation are not overlooked. The investigator, to realise his goal, must understand (a) what physical evidence is (b) how to collect and preserve it (c) how to obtain from it the information it carries; and (d) how to interpret the information so obtained. Even the laboratory investigator who should appreciate the value of such evidence more than any ordinary police officer, sometimes destroys it quite casually. The temptation, when confronted with evidence of a type whose examination is not familiar to him is to destroy such evidence so as to avoid embarrassment later. Some men who are experts in one line, whose judgment is perfectly sound in dealing with the highly technical problems with which they are familiar, are likely to have a warped perspective when dealing with problems arising in fields which are strange to them. In such cases the officer should, if he is conscientious, explore the possibility of involving a better expert who can solve the mystery.

Today we have very well equipped laboratories and expert scientists to man them. But even the best managed laboratories cannot produce the answers desired unless physical evidence at scenes of crimes is connected in a methodical and systematic manner. The actual number of such failures could, however, be greatly reduced if both field and laboratory investigators understand their problems and co-operate fully. All laboratory findings are related to a probability, and that a single piece of evidence is rarely sufficient in itself to establish proof of guilt or innocence. A single piece of evidence would be like a single piece of a Jig-saw puzzle which in itself cannot enable an expert to describe the entire scene. Only when the entire story is available can the final, proof be produced. For instance, it would be futile to bring to the laboratory a piece of paint and expect it to prove that a particular car was involved in a homicide. The piece of paint may strengthen an already good case, or it may yield proof of innocence of a suspect, but the best it can be expected to prove is that a car having

that type of paint was the car involved in the crime. Since there are considerable number of cars with a similar paint such evidence, in itself, can prove nothing, unless supported by other evidence, such as broken glass, cloth impressions, blood or any other variety of other useful evidence which the officer, collecting the evidence, might have overlooked. Thus overlooking any essential evidence not only fails in solving the crime but could result in an innocent person being hauled up before the law. The police officer who has pride in his profession and has confidence in his knowledge and takes all advantage of all the currently available scientific methods of crime detection, tackles his job with the quiet courtesy born out of competence. The ignorant officer all too frequently masks his ignorance with brutality and may well send innocent persons to prison. Both the laboratory and the police officer must always keep in mind the fact that they are not competitive but supplementary in their functions. The laboratory cannot help unless the officer makes it possible, and the officer can solve many more crimes if he utilises the laboratory to the fullest extent.

Study of Physical Evidence serves a double purpose. Firstly, it is often the decisive factor in determining guilt or innocence. The testimony of the scientific expert should be sufficient to determine the final decision of the court. It can do so by supplying demonstrable facts, unclouded by statements of uncertain or prejudiced witnesses. Secondly, the study can be a materialised in locating the perpetrator of a crime. If, for instance, the laboratory can describe the clothes worn by the criminal, given an idea of his stature, age, hair colour, or other similar information, the area of search for the criminal, is considerably narrowed down.

The importance of overlooking nothing that will contribute to the final solution of a crime cannot be over-emphasised. One such aspect is the microscopic evidence. This type of physical evidence can contribute as much or more than any other type of evidence obtainable including oral evidence. It is well established that the most useful types of physical evidence are generally microscopic in dimensions and these are most likely to be overlooked. The microscopic evidence persists at the scene of crime long after all the visible is removed. In several instances, crimes

have been solved by collecting and examining such evidence, even months or years after all other evidence had been collected and found to be indecisive. If there is a single important lesson to be learned by the investigator, it is the necessity to properly evaluate the significance of various types of microscopic physical evidence and the extent to which he may rely on it.

The general rule for collection of material is to take a little of everything, even if its connection with the crime appears dubious. By using knowledge and experience an intelligent appraisal should be made to consider what significance a particular exhibit may have and what examination the laboratory may conduct. If this is understood the trained investigator will normally be able to correctly secure and preserve the exhibits.

CHAPTER III

**DUTIES OF THE INVESTIGATING OFFICER AT
THE SCENE OF CRIME***At the scene*

- (1) Ensure that the first person sent to the scene of crime is an experienced officer. On arrival at the scene he should record time, place and weather condition.
- (2) He should note down the names and addresses of the persons at the scene and their information concerning death.

Legal formality

- (1) He could collect two witnesses.
- (2) Along with the witnesses survey the body without disturbing or moving anything. He must satisfy himself that the victim is dead. But in case of any doubt, he should take steps for medical treatment. He will remove the body after drawing an outline of the body to indicate the place where it was lying.

Protection

- (1) He should restrict all the unnecessary persons and protect the scene of crime.
- (2) He should then start methodical and orderly search of physical clues and investigation.

Record

- (1) Complete description of the area is to be prepared.
- (2) He should note everything in writing.

Plan

- (1) A rough sketch of the area on the basis of accurate measurement is to be made.

- (2) Permanent fixtures are to be included and the place where the body is lying is to be indicated from permanent fixtures.
- (3) Other important physical clues are to be measured and fixed in the like manner.
- (4) The measurements are to be noted on the sketch so that accurate and permanent plan on definite scale can be drawn later on.

Photograph

- (1) Photographs should be taken preferably by the experts. While taking photographs of the scene, do so carrying the camera clockwise and take several pictures of the general view. In cases of homicide, a set of views should be selected to show significant aspects of the body of the victim. For small objects two photographs should be taken one at close range to obtain a fairly large image of the object and another from approximate 6 feet away in order to bring the background in view and to show the object in perspective.

The purposes behind taking photographs are the following:—

- (i) To explain how the murder took place.
- (ii) To identify the victim.
- (iii) To show all possible elements of the crime.
- (iv) To show the scene from all angles.
- (v) To show different physical clues and their location.
- (vi) To study and analyse by the experts and to produce before the court.

Collection of clues/exhibits

- (1) Photograph finger prints before lifting.
- (2) Use gloved hands or forceps to collect the objects.

- (3) Pick up the larger objects ,of material significance, first.
- (4) Use polythelene bags for keeping most of these objects.
- (5) Clothing or bedding should be rolled and tide in a bundle with wrapping paper, each item in a separate wrapper.
- (6) Ensure to put your identifying mark on every object with date and place of origin, the latter on the wrapper or the envelope.
- (7) Keep a record of the objects collected, the time and place, witnesses present and other pertinent information.
- (8) In cases of forced entry into any premises find all the tool marks and record them. Remove the original to the laboratory, if possible and if not prepare casts of the marks.
- (9) In cases of broken glass, paint, wood or metal objects damaged, always collect a standard of that material from the scene for later comparison with any similar material found on the person, clothing etc. of any suspect later apprehended.
- (10) Ensure that the entire object, containing seminal, urinary or other stains, is sent to the laboratory if possible and if not a piece of the object, containing the stain, should be cut and sent.
- (11) Deliver objects with stains, to the laboratory immediately. If unable to deliver immediately, allow the stain to dry completely before packing to prevent decomposition.
- (12) Place each stain in a separate container.
- (13) In hit and run cases all glass found on the scene should be recovered and pieces from different locations kept separately in different containers.
- (14) When soil comparison is involved, the samples from the scene should be secured and sealed so that no loss of the specimen can occur.

- (15) In arson cases flammable fluids should invariably be preserved in glass container and tightly sealed.
- (16) In the case of unexploded bombs the Chief Controller or Deputy Controller of Explosives, should invariably be called to defuse it and dispose it of. The army experts should be called if they are available.
- (17) In the case of exploded bombs the scene should be photographed and all bomb parts like fuse residue deposits etc. should be carefully collected, preserved and sent to the expert/laboratory.
- (18) In the case of wire thefts the cut ends having destructive characteristics of the tool marks should be preserved for comparison when the stolen wire is recovered.
- (19) Identity of the person is to be fixed. His name, address, character, association, possession of any weapon, etc. are to be collected.
- (20) The body is to be described completely from the top of the head to the tip of the toe.
- (21) While describing the body the following points must be noted:
 - (i) Where and how the body is lying.
 - (ii) Description of visible wounds.
 - (iii) Description of blood—where located, size, direction of flow and colour.
 - (iv) Description of clothing starting from top to bottom and the condition of clothing.
 - (v) Description of jewellery.
- (22) Before removing the dead body the I.O. should:
 - (i) protect the hands.
 - (ii) cover the body.
 - (iii) protect all blood stains.

- (iv) Look underneath the body and in the clothing for bullet or other loose things.
 - (v) Depute an escort for protection and identification of the **dead body**.
- (23) After the body was removed, he should look carefully the place underneath the dead body to trace out a bullet or any other material which have dropped from the body.

Search and investigation

- (24) Search for physical clues and investigation at the scene of crime:
- (i) Stairs, passages, entries to scene, streets, yards and neighbourhood.
 - (ii) Outer doors—bolted, locked, marks of breaking.
 - (iii) Waste basket or dust bins.
 - (iv) Windows.
 - (v) Letter Box (date of mail).
 - (vi) Newspaper (date).
 - (vii) Inside door—locked, bolted—key on what side.
 - (viii) Safes, almirahs, boxes—position clothing, jewellery etc.
 - (ix) Lighting—which light on or off.
 - (x) General condition—presence or absence of signs of struggle.
 - (xi) Smell.
 - (xii) Clocks and watches—working condition—timing.
 - (xiii) Tables, drawers—condition.
 - (xiv) Bottle, container, ash tray.

- (xv) Kitchen, bath room (towels, sinks, commodes, etc).
- (xvi) Damages.
- (xvii) Clothings.
- (xviii) Notes, letters, books.
- (xix) Hanging—source of rope, knot.

N.B.—The I.O. should not take any unnecessary person, nor smoke or throw away match-stick or any thing which may later on be confused with evidence at the scene.

CHAPTER IV

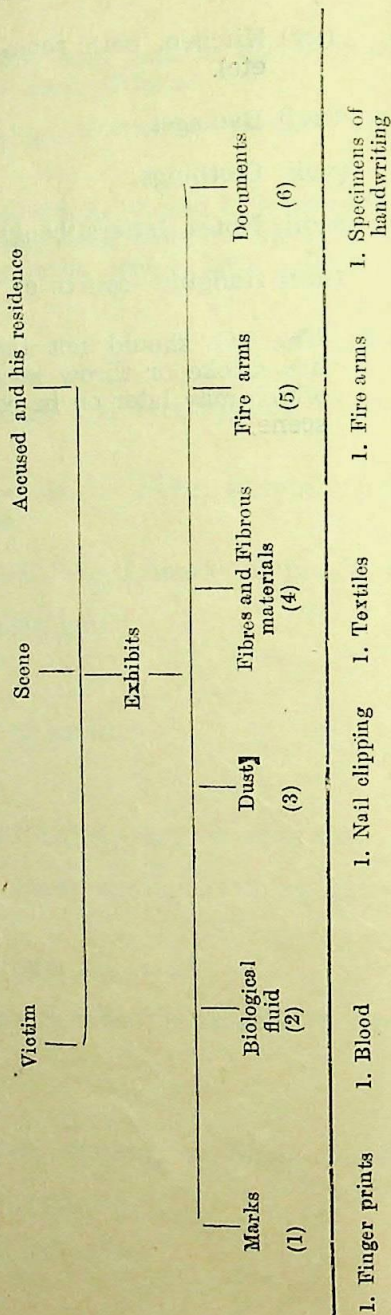
CLUE IDENTIFICATION

The clues to be looked for during investigation would be in the following three areas viz.,
 (1) The scene of the crime; (2) The victim, if any; and (3) the suspect/accused and his environment.

2. The clues to be searched for and the exhibits of offences to be collected are depicted in the following chart:

Clue Identification

The exhibits of offences may be found at the following places in the following forms:



2. Foot prints	2. Semen	2. Cloth	2. Human hair	2. Cartridge cases	2. Impressions on (a) writing pad (b) undersheet (c) blotters (d) Carbon papers
3. Tool marks	3. Urine	3. Shoe	3. Animal hair	3. Bullets	3. Typewritten documents
4. Tooth marks	4. Sputum	4. Nail polish	4. Fur	4. Wads	4. Stamps
5. Tyre marks	5. Vomit	5. Lipstick	5. Feather	5. Stray pellets	
6. Mould marks on counterfeit coins.	6. Food remnants	6. Vegetable	6. Vegetable fibres	6. Bullet marks	
7. Articles cut	7. Empty plinls	7. Glass	7. Artificial fibres	7. Signs of burning	
8. Marks indicating struggle	8. Drinking glass	8. Sand		8. Signs of burning of powder	
9. Field outnumbers	9. Chemicals	9. Earth			
10. Blotting paper, carbon paper, etc.	10. Seeds	10. Paint			
11. Oil and grease marks	11. Powders	11. Metal filling on clothes			
12. Dagger, glass etc. with blood or fingerprint					

N.B.—Control sample is to be taken whenever necessary.

3. Separate eleven charts are given for the following types of offences/incidents as guidelines to the Investigating Officers:

1. Investigation of a Homicide case.
 2. Poisoning.
 3. Traffic accidents.
 4. Rape and carnal offences.
 5. Kidnapping and abduction.
 6. Rioting.
 7. Robbery and Dacoity.
 8. Thefts.
 9. Counterfeiting.
 10. Offence/Incidence involving use of firearms.
 11. Offence/incidence involving use of explosives.
-

CHART I

INVESTIGATION OF A HOMICIDE CASE

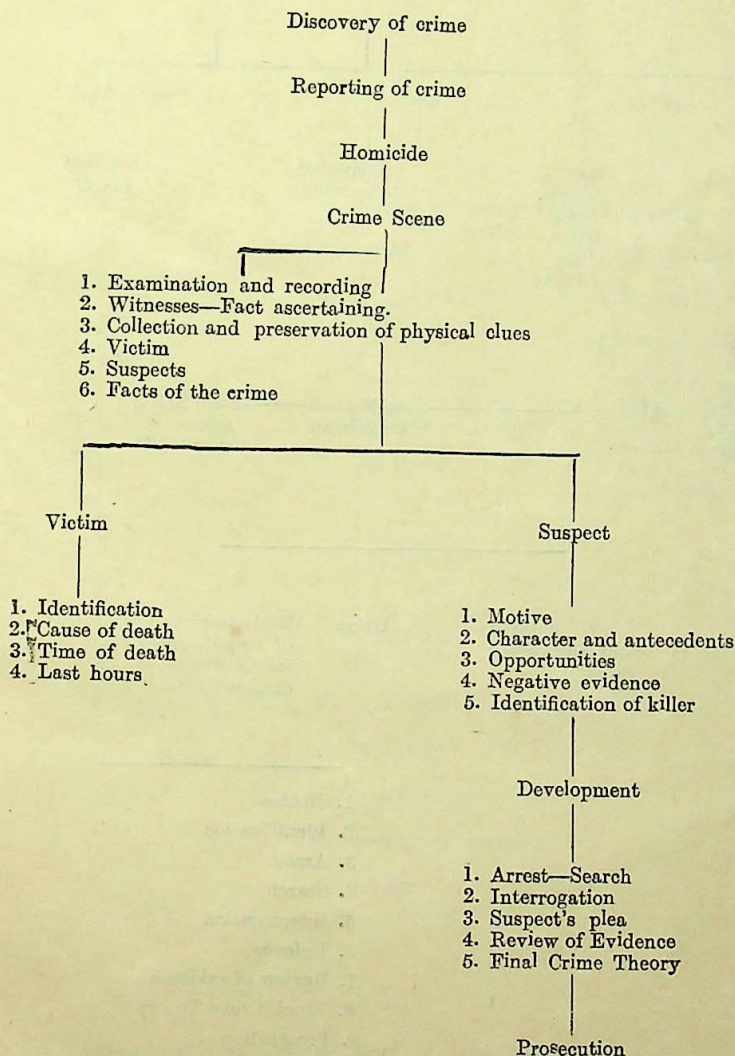


CHART II

POISONING

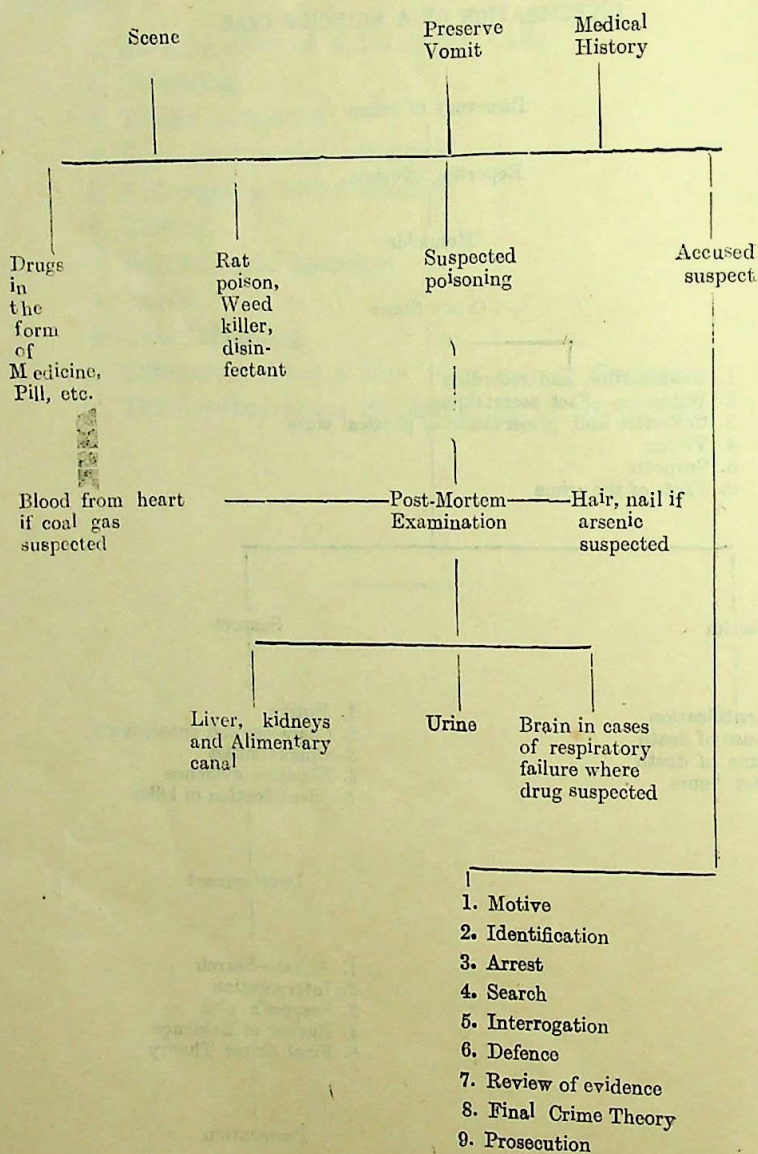


CHART III

TRAFFIC ACCIDENT

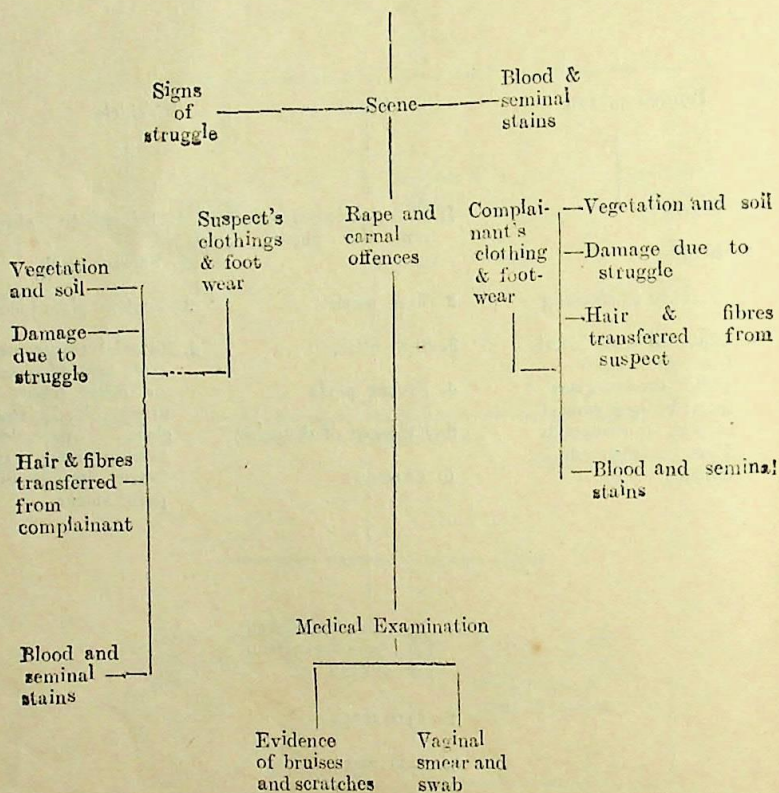
Injured person	Scene	Vehicle
<ol style="list-style-type: none"> 1. Injury 2. Blood 3. Damage to clothing 4. Material transferred from the vehicle— paint, grease, glass from broken wind- screen, mirror, etc. Tyre marks on clothes 	<ol style="list-style-type: none"> 1. Materials transferred both from the person and vehicle 2. Tyre mark 3. Skid mark 4. Broken parts 5. Evidence of dragging 6. Damage 	<ol style="list-style-type: none"> 1. Damage to vehicle 2. Scratch mark 3. Broken glass pieces 4. Material transferred from injured person or other vehicle— fibres, blood-stains, glass particles, human tissue, hair fabric impression, paint smear
	<ol style="list-style-type: none"> 1. Materials transferred both from the person and vehicle 2. Tyre mark 3. Skid mark 4. Broken parts 5. Evidence of dragging 6. Damage 	

Controls—Samples of materials likely to be transferred.

CHART IV

RAPE AND CARNAL OFFENCES

Bed clothes, rugs etc. if indoors

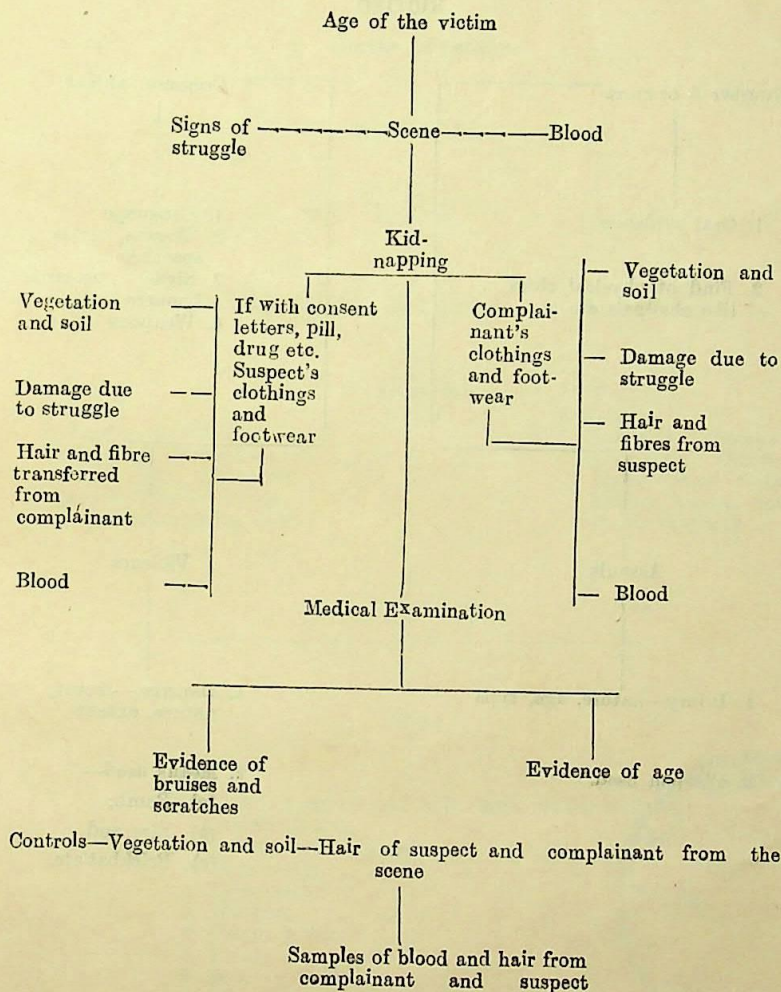


Controls—Vegetation and soil—Hairs of suspect and complainant from scene

Samples of blood from complainant and suspect.

CHART V

KIDNAPPING AND ABDUCTION



In the offence of Abduction, age is not a factor and the offence is committed either with fraud or force. Hence the clues will be the same.

CHART VI

RIOTING

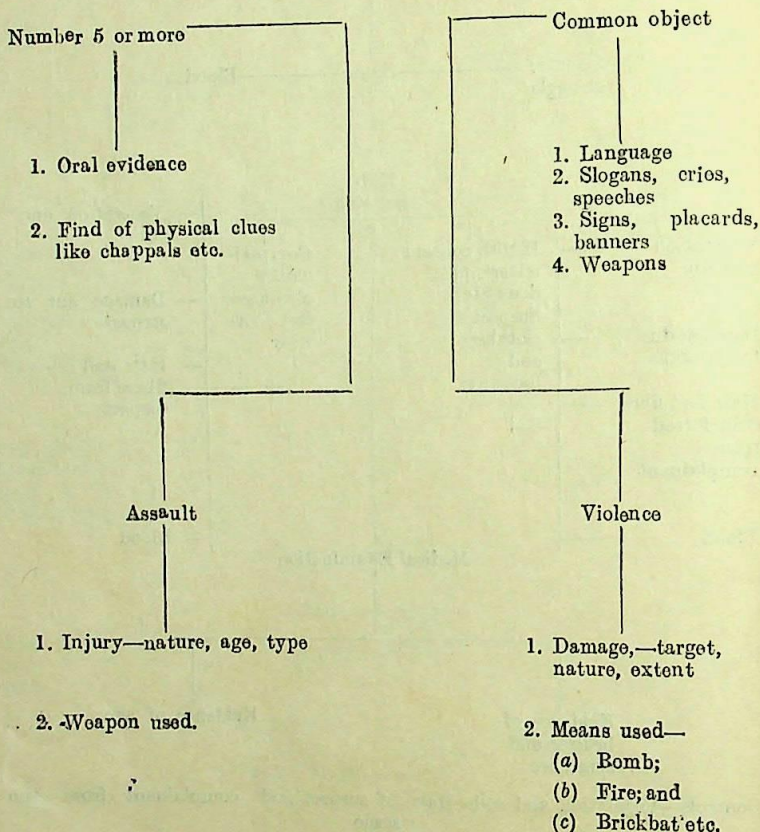
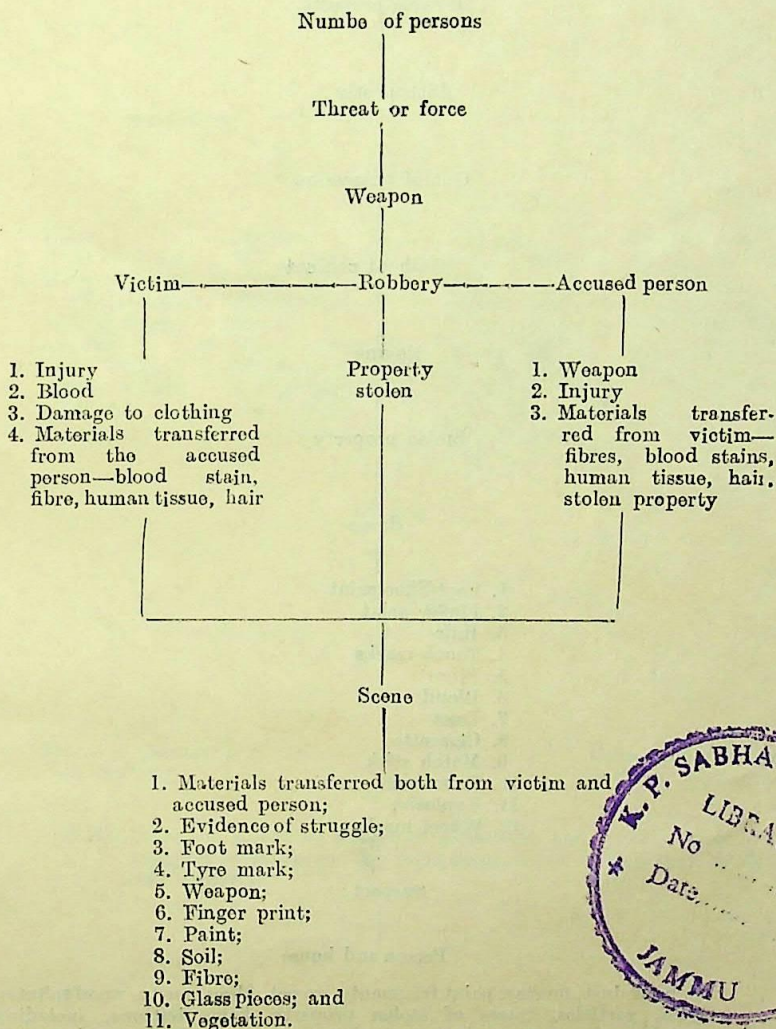


CHART II

ROBBERY AND DACOITY



Controls—Samples of materials likely to be transferred.

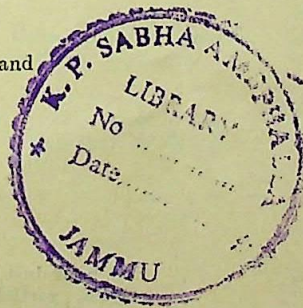


CHART VIII

THEFTS

Movable property

Dishonestly

Out of possession

Without consent

Moving

Stolen property

Scene

1. Foot/Shoe print
2. Finger print
3. Hair
4. Tooth marks
5. Fibre
6. Blood
7. Dust
8. Cigarette
9. Match stick
10. Excrement
11. Explosive
12. Wheel marks

Suspect

Person and house

Soil, brick dust, mortar, paint fragments, carpet, fibres, putty, wood splinter, glass, particles, traces of stolen property, keys, buttons, including metals, ash, asbestos, glass wool, slag wool, cork, food residues, oil, face powder, cobwebs, rust, fragment of textiles, tobacco, wood dust vegetable cutter, tools, knives, weapons, ammunition.

CHART IX

COUNTERFEITING

I Scene

- | | | | |
|---|---|---|---|
| <ul style="list-style-type: none"> 1. Coins 2. Parts of coins. 3. Metal which could be used for making coins, e.g. lead 4. Tin Metal caps from Soda siphons. 5. Blanks | <ul style="list-style-type: none"> 1. Plaster & Metal moulds 2. Metal dies and stamping machines. 3. Any materials likely to be used for making moulds 4. Blank discs | <ul style="list-style-type: none"> 1. Implements—pliers, knives, files, clamps, Emery paper, Heating appliances, Melting pots. 2. Electroplating apparatus—batteries, pieces of wire, solutions 3. Acids | <ul style="list-style-type: none"> 1. Table and floor coverings. 2. Dusters and pieces of waste may bear traces of metal, plaster, etc. |
|---|---|---|---|

II Suspect

Traces of plaster, metal etc.
on clothing

Coins, pocket knives,
other implements.

N.B.—Search of the scene should be exhaustive and should include the sweeping of the floor of any room suspected of having been used for making coins.

CHART X

OFFENCE/INCIDENCE INCLUDING USE OF FIREARM

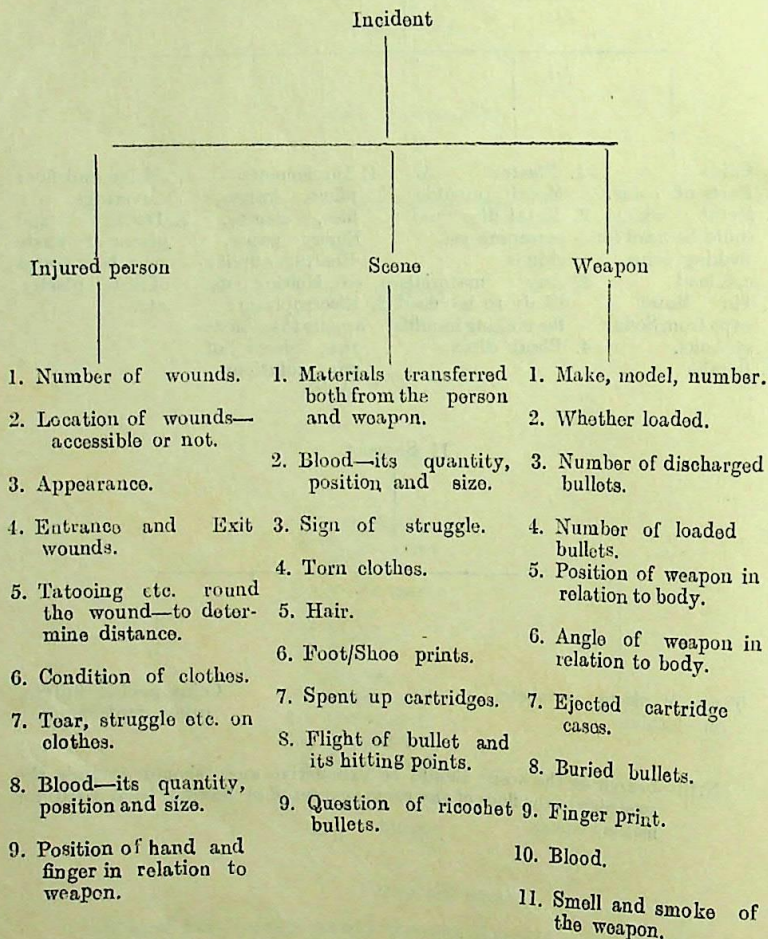
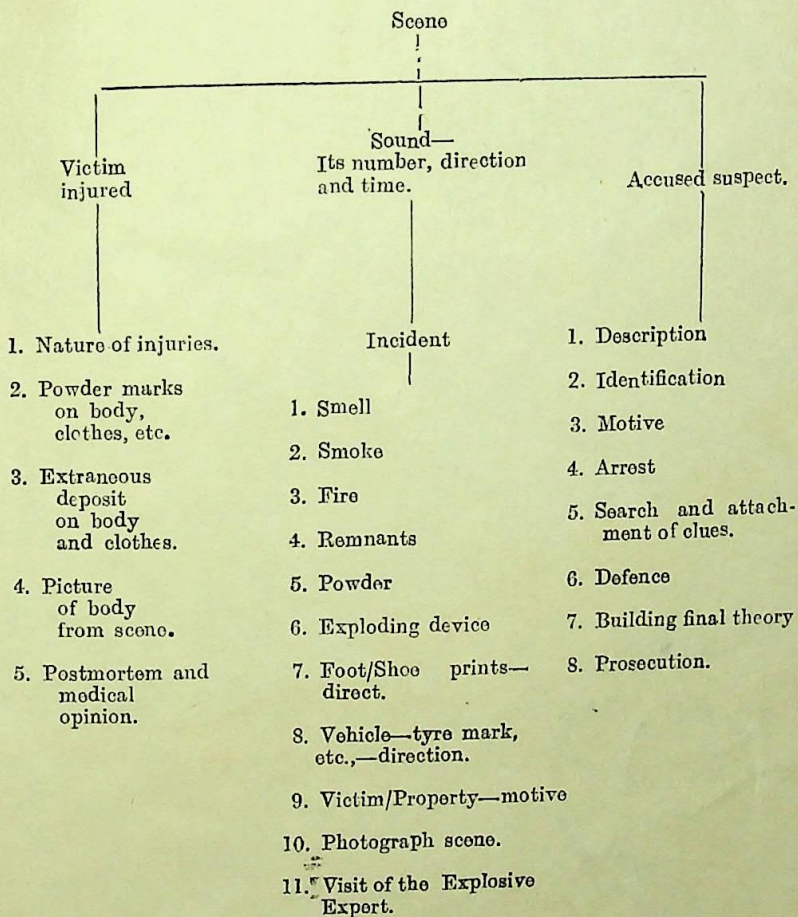


CHART XI

OFFENCE/INCIDENCE INVOLVING USE OF EXPLOSIVES



UNITED STATES DEPARTMENT OF COMMERCE

1914

1. Name of vessel	2. Date of departure	3. Name of master
The S. S.
The S. S.
The S. S.
The S. S.
The S. S.
The S. S.
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